

A NEW PHENACOCOCCUS ON PLATANUS OCCIDENTALIS.

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Phenacoccus (Paroudablis) osborni, n. sp.:—Female (adult) is 2 to 2½ mm. in length, and 1 to 1¼ mm. in breadth, is flesh-colored and covered with a slight, white powdery secretion. There are seventeen very short, inconspicuous, lateral filaments on each side. Although the filaments are short, spinnerets and numerous hairs are scattered over the surface of the body, being especially numerous in the cephalic region. On the anterior ventral margins of the second and third segment, are two large spiracles. The anal lobes, bear each, two long hairs and three short ones, besides the spines. The large, retracted anal ring bears the customary six long hairs, and is conspicuously dotted. The eyes are prominent, though not large. The antennae are eight jointed, the eighth joint, in many specimens, having a tendency to divide. The formula is as follows: 8, 3, 2 (4, 5,) 1 (6, 7). The legs are well developed and darker in color than the body; the tibia being nearly three times the length of the tarsi, and bearing a pair of strong spines on the distal end. Numerous hairs are borne by the tarsi but no noticeable digitules. A pair of knobbed digitules is borne by the long single-toothed claws.

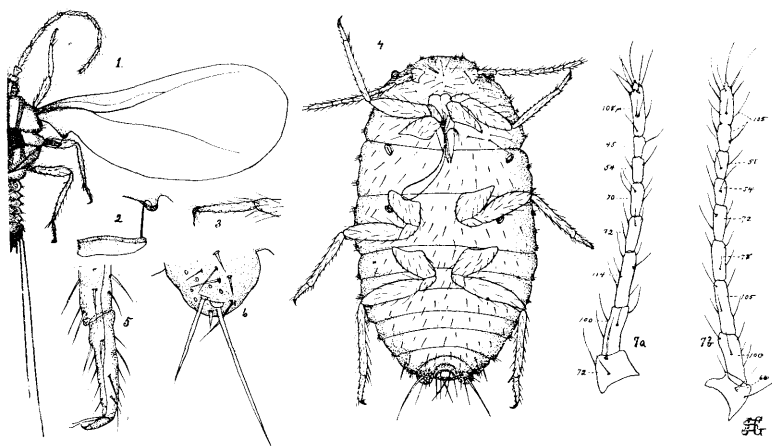
The eggs are long-elliptical, golden-brown, rather firm, measuring .3 mm. x .15 mm.

Male (adult) is an active, well-constructed insect; the thorax constituting one-half the length of the individual. Measurements: From tip of head to tip of abdomen, .85 mm.; wing expanse, 2.8 mm. From tip of head to tip of folded wings along dorso-median line, 1.5 mm.; length of wing, 1.25 mm.; width of wing, .55 mm.; length of balancers, .1 mm. Caudal filaments, two about 1.25 mm., and two about 1 mm. in length. Front legs; femur .25 mm., tibia .35 mm., tarsus .12 mm., claw .03 mm. in length. Hind legs; femur .3 mm., tibia .4 mm., tarsus .13 mm., claw .03 mm. in length. Antennae are 1 mm. in length, the joints measuring; 1st, .45 mm., 2nd .60, 3rd .160, 4th, .150, 5th, .135, 6th, .120, 7th, .96, 8th, .75, 9th, .63, 10th, .90. Formula: 3, 4, 5, 6, 7, 10, 8 (9, 2,) 1.

Color : Head, dark reddish-brown ; eyes, blackish ; thorax, reddish-brown except dark, chitinous parts ; abdomen light-brown tinged with yellow. Antennae, reddish-brown ; legs, brown to olivaceous with dark-brown tarsi. Caudal filaments, white ; wings, semi-transparent with iridescent rose-tint in strong light. Balancers, darker, slightly chitinous on costal margin, bearing one long, hooked claw which fits into a pocket in the wing.

Although the head is very small and much reduced, and bears four reddish ocelli, the thorax is very large and well developed and bears a black, shield-shaped chitinous plate on the meso-scutum, from which three dark, chitinous bands extend to the anterior margin of the thorax.

The legs are long and hairy for their entire length ; the tibia bear a pair of strong spines on their distal extremity ; the tarsi are armed with numerous spines ; the claws are long and curved, and bear a sharp denticle on the ventral margin, near the tip. Two knobbed digitules are present, extending beyond the tip of the claw.



EXPLANATION OF PLATE.

Fig. 1—Adult male. Fig. 2—Balancer with hook fitting into pocket in wing. Fig. 3—Posterior tarsus of male. Fig. 4—Adult female. Fig. 5—Posterior tarsus of female. Fig. 6—Lateral lobe of abdominal extremity of female. Fig. 7a—Left antenna of female. Fig. 7b—Right antenna of female.

The males were found emerging from the pupa-cases from April 13 to 18, and taking wing readily.

The females were found, during the winter, under loose bark on the trunks and larger limbs of *Platanus occidentalis* on the campus of Ohio State University at Columbus. Not abundant.

A Chalcid parasite was reared from specimens collected in February.

The above description and drawings were submitted to Prof. T. D. A. Cockerell, to whom the author is greatly indebted for

his expert opinion and valuable suggestions. Prof. Cockerell says, "It appears to be a perfectly good species," and adds, "There is a *Phenacoccus platani* on *Platanus* in Europe. This differs from your insect as follows: (1) It (female) is larger; nearly 4mm. long. (2) It has a dorsal band. (3) It has the second antennal joint longer than the third (which is also the case in *P. helianthi*, *P. solenopsis*, *P. wilmattae*, etc.

"*Phenacoccus piceae* has the same size as your species, but it also has the long second joint; its color is orange or pink, and the male is pink or flesh color, with the apodema and scutellum red. It lives on *Abies* in Austria."
